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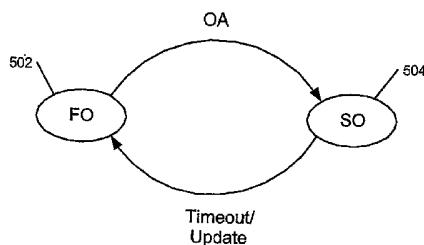
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

[Continued on next page]

(54) Title: HEADER COMPRESSION ENHANCEMENT FOR BROADCAST/MULTICAST SERVICES



(57) Abstract: Methods and apparatus for compression of headers in broadcasting BCMCS services in a wireless communication system are described. Techniques used in BCMCS systems without feedback include sending static context information during BCMCS service initialization for use in a decompressor in a mobile station. Techniques used in BCMCS systems with feedback include receiving feedback from distributed mobile station decompressors and adjusting the broadcasting compressor in response to the feedback. Techniques that reduce the number of operating states in both the compressor and the decompressor are described. Techniques to classify flows so that a reduced number of contexts are used to compress/decompress session packet headers in a push-to-talk service are described.



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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INTERNATIONAL SEARCH REPORT

Interr	Application No
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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04L29/06 H04L12/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, COMPENDEX, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BORMANN C ET AL: "Request for Comments 3095, Robust header compression (ROHC), framework and four profiles: RTP, UDP, ESP and uncompressed" NETWORK WORKING GROUP REQUEST FOR COMMENTS, XX, XX, 2001, pages 1-168, XP002220600	1-46, 55, 56
Y	paragraph '4.3.1! - paragraph '4.3.2! paragraph '5.7.7!	54
X	US 2002/142730 A1 (HSU RAYMOND T) 3 October 2002 (2002-10-03) paragraph '0014! - paragraph '0017! paragraph '0072! - paragraph '0075! ----- -/--	1-46, 55, 56

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *Z* document member of the same patent family

Date of the actual completion of the international search

23 February 2005

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02.03.05

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

Inter: Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/141365 A1 (LEUNG NIKOLAI K N) 3 October 2002 (2002-10-03) paragraph '0139! paragraph '0156! - paragraph '0159! -----	1-46, 55, 56
A	EP 1 283 617 A (SIEMENS AG) 12 February 2003 (2003-02-12) abstract -----	1-46, 55, 56
X	US 2002/102999 A1 (MAGGENTI MARK ET AL) 1 August 2002 (2002-08-01)	47-53
Y	paragraph '0009! paragraph '0023! paragraph '0094! paragraph '0105! - paragraph '0109! paragraph '0122! -----	54
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X	US 2002/150091 A1 (LOPPONEN JUSSI ET AL) 17 October 2002 (2002-10-17) paragraph '0011! paragraph '0119! paragraph '0208! -----	47-53
X	US 2003/012149 A1 (MAGGENTI MARK ET AL) 16 January 2003 (2003-01-16) paragraph '0159! - paragraph '0204! -----	47-53

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2004/025568

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/US2004 /025568

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-46,55-56

A compression system for broadcasting in a wireless communication system

2. claims: 47-54

Multicasting with single context from parameters in the data stream

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/US2004/025568

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